REMARKS

Claims 1, 3, 8-13, 18-21, 24 and 26-37 are pending in the present application. Claims 1, 8, 9, 11, 12, 18-21, 24, 26, 30, and 33-36 have been rejected under 35 U.S.C. §102(e) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 6,024,089 to Wallace et al. ("Wallace"). Claims 10 and 29 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Wallace. Claims 3, 13, 27, 28, 31, and 32 have been initially rejected under 35 U.S.C. §103(a) as being unpatentable over Wallace in view of U.S. Pat. No. 5,885,245 to Lynch et al. ("Lynch"). Applicants respectfully traverse these rejections.

By this Response, Applicants amended Claims 1, 11, 21, 30, 35 and 36. The claims have been amended to more clearly define the present invention and to distinguish from the Wallace invention. In the amended claims, the routine of the controller that is responsive to a status of the programmable medical device is dynamic, and takes place *without user input*. Accordingly, Claims 1, 3, 8-13, 18-21, 24 and 26-37 are at issue. The amendments were discussed with the Examiner during the May 6, 2002 telephonic interview, and are in compliance with his request. In light of the amendments, Applicants believe the present application is in condition for allowance and respectfully requests early notice of same.

I.   CLAIM REJECTIONS

The Examiner rejected Claims 1, 8, 9, 11, 12, 18-21, 24, 26, 30, and 33-36 under §102(e) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over Wallace. In light of the discussion during the telephonic interview, and the current amendments, Applicants respectfully traverse these rejections.

As discussed during the interview, the present invention is distinctly distinguished from Wallace in that the claimed medical device selectively displays only those entry keys which are required by the medical device based on a routine which is responsive to the status of the programmable medical device *without user input*. Conversely, the disclosure of Wallace **requires user input** to modify the display of the screen.

A.   Controller responsive to status of medical device without user input vs. user inputs

As indicated in the independent claims 1, 11, 21, 30, 35, and 36 and in the specification of the present invention, the controller or graphic user interface *obtains the status of a medical device* and then selectively displays and/or enables the display keys on the display screen *based on the status of the medical device*. This process is the result of a routine programmed in the controller. User input is not necessary. An example of one aspect of this process is described in the specification of the application: "Referring to Fig. 8, in step 803 the selectable graphic interface program determines the pump status. In Step 804, using the pump status, the selectable graphic interface program determines the display of the appropriate keys for the particular pump status, for example program, test, data input and the like. Finally, in step 805, the selectable graphical interface program causes the appropriate active keys to be displayed, highlighted or otherwise made active" (page 11, lines 19-31).

Conversely, the Wallace invention is intended for the user to provide inputs in order to display the next screen with appropriate control buttons. While the processor controls the displaying of a plurality of screens, the processor requires user inputs for the display of the screen, not from feedback of the ventilator. Fig. 4 in the Wallace patent is a schematic diagram, primarily in block form, of the sequence of display screens typically displayed by the graphic user interface. The flow chart clearly indicates the control of the display of the screens is uni-directional without any feedback from the ventilator. There are numerous examples of screen displays controlled by user inputs cited in the specification of Wallace. For example, once the ventilator starts up, "The information area 160 of the ventilator startup screen 200 provides the user with three on-screen buttons to choose from to initiate the next step in completing the setup of the graphic user interface" (col. 10, lines 5-8). "When the NEW PATIENT on-screen button 230 is touched, the processor 30 responds by displaying a new patient setup screen" (col. 11, lines 5-7). "For example, if the user selects "A/C" mode and "PC" mandatory type, the processor 30 will display on-screen buttons for changing ventilator settings related to pressure control of the ventilation" (Col. 12, lines 50-53).

B.   Dynamic vs. Static Response

As amended, the routine of the controller or graphical user interface of the present invention that is responsive to a status of the programmable medical device to generate a display of a plurality of entry keys and for selectively displaying on the display device only those keys which are required by the status, *without user input*, for inputting commands to the programmable medical device is dynamic and takes place during each phase of control or programming. The dynamic screen display changes based on the status of the medical device during the entire operation of the medical device.

Conversely, the screen displays of control buttons of <u>Wallace</u> are not altered during the operation of ventilation based on changes in the status of the ventilator. Instead, the screen displays are based only in response to inputs from the user. <u>Wallace</u> never suggests, discloses, or teaches to obtain the status of the medical device to change the screen displays to control the device during the operation of the device. Further, <u>Wallace</u> does not have the ability to receive information from the medical device concerning the status of the device. The only capability <u>Wallace</u> has to receive information from the device solely concerns clinical information of the patient and static parameters of the ventilator for purposes of display only (i.e., to provide information, such as alarm messages, to the user). The information received from the device in <u>Wallace</u>, however, does not control the screen display with respect to displaying buttons for controlling the device. Because the relevant scope of <u>Wallace</u> is limited to receiving user inputs and the main objective of <u>Wallace</u>, as evidenced by the title of the patent "System and Method for Setting and Displaying Ventilator Alarms," is to generate alarm messages during the operation of the device, it is clear that <u>Wallace</u> never considers the capability of requesting, obtaining and utilizing ventilator status information to not only generate a display of control buttons, but further to selectively display/enable those buttons based on the retrieved ventilator status information during the operation of the device without user inputs.

With respect to the rejections of the dependent claims, each of the dependent claims necessarily includes all of the limitations of the base independent claim. If an independent claim is non-obvious under § 103, then any claim depending therefrom is also non-obvious.

Finally, as previously discussed in prior responses, <u>Lynch</u> has no teaching or suggestion to have selective display of the keys of the medical device according to the status of the device and without user input.
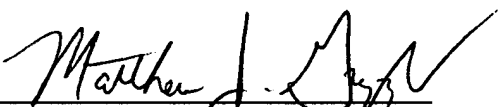
II.   <u>Conclusion</u>

For the above reasons, Applicants respectfully request the Examiner to reconsider and withdraw his initial rejection of the claims under §§ 102(e) and 103(a). In view of the amendments made herein and the foregoing remarks, Applicants submit this application is in condition for allowance. Such action is respectfully requested. The Examiner is requested to contact the undersigned if the Examiner has any questions concerning this Reply.
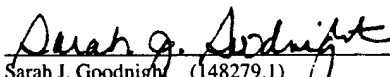
Respectfully submitted,

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APPENDIX A: Marked-up Claims

1. (Twice Amended) A programmable medical device, comprising:

a display device;

an input device for allowing a user to input commands to control the programmable medical device, the input device comprising:

a routine, responsive to a status of the programmable medical device <u>and without user input</u>, for generating a display of a plurality of entry keys disposed in a spatial configuration and for selectively displaying on the display device only those entry keys which are required by the status for inputting commands to the programmable medical device during each phase of control or programming; and

a selector for allowing a user to activate the displayed keys to allow the user to input commands to control operation of the programmable medical device.

11. (Twice Amended) A programmable medical device, comprising:

a display device;

an input device for allowing a user to input commands to control the programmable medical device, the input device comprising:

a plurality of entry keys disposed in a spatial configuration;

a routine, responsive to a status of the programmable medical device <u>and without user input</u>, for selectively enabling only those entry keys which are required by the status for inputting commands to the programmable medical device [during each phase of control or programming].

21. (Twice Amended) A controller for controlling a programmable medical device comprising:

a display device;

a routine, responsive to a status of the programmable medical device <u>and without user input</u>, for generating a display of a plurality of entry keys disposed in a spatial configuration and for selectively displaying on the display device only those entry keys which are required by the

status for inputting commands to the programmable medical device during each phase of control or programming; and

a selector for allowing a user to activate the displayed keys to allow the user to input commands to control operation of the programmable medical device.

30. (Twice Amended) A medical apparatus comprising:

a programmable medical device, the programmable medical device being disposed at a first location and comprising:

an input device for allowing a user to input commands to control the medical device, the input device having a plurality of entry keys disposed in a spatial configuration; and

a remote controller for monitoring and controlling the programmable medical device, the remote controller being positionable at a second location remote from the first location but in communication therewith, the remote controller comprising:

a display device;

a routine, responsive to a status of the programmable medical device and without user input, for generating a display of a plurality of virtual entry keys disposed in a spatial configuration and for selectively displaying on the display device only those virtual entry keys which are required by the status for inputting commands to the programmable medical device [during each phase of control or programming]; and

a selector for allowing a user to activate the displayed virtual entry keys to allow the user to input commands to control operation of the programmable medical device.

35. (Twice Amended) A method for controlling a programmable medical device, the programmable medical device having a display device, an input device for allowing a user to input commands to control the programmable medical device, the input device having a routine, responsive to a status of the programmable medical device and without user input, for generating a display of a plurality of entry keys disposed in a spatial configuration and for selectively displaying on the display device only those entry keys which are required by the status for inputting commands to the programmable medical device; and a selector for allowing a user to

activate the displayed keys to allow the user to input commands to control operation of the programmable medical device, comprising the steps of:

determining the status of the programmable medical treatment device [during each phase of control or programming];

selecting those entry keys which are required by the status for inputting commands to the programmable medical device; and

displaying only those entry keys which are required by the status for inputting commands to the programmable medical device.

36. (Twice Amended) A method for controlling a programmable medical device, the programmable medical device having a display device, an input device for allowing a user to input commands to control the programmable medical device, the input device having a plurality of entry keys disposed in a spatial configuration; and a routine, responsive to a status of the programmable medical device and without user input, for selectively enabling only those entry keys which are required by the status for inputting commands to the programmable medical device comprising:

determining the status of the programmable medical device during each phase of control or programming ;

selecting those entry keys which are required by the status for inputting commands to the programmable medical device; and

enabling only those entry key which are required by the status for inputting commands to the programmable medical device.